

What is claimed is:

1. A video editing apparatus for performing video editing in realtime of at least two video streams derived from a codec able to retrieve two video sources from a data storage device and output two uncompressed video data streams, the apparatus comprising:

    a video data storage device;

    a graphics processor having at least two video inputs and a video output;

    a video decoder having a video signal input and an uncompressed digital video output;

    a video encoder having an uncompressed video data stream input and a display signal output;

    a first video bus transferring data between said video output of said graphics processor and said video encoder when said apparatus is operating in a realtime video editing mode;

    a second video bus transferring data between said codec and said at least two video inputs of said graphics processor when said apparatus is operating in a realtime video editing mode;

    said video decoder using one of said first and said second video buses to transfer data to said video encoder in a non-editing playback mode, and said video decoder using one of said first and said second video buses to transfer data to said codec in a video capture mode.

2. The apparatus as claimed in claim 1, wherein said video decoder transfers data to said codec and to said video encoder using said first video bus.

3. The apparatus as claimed in claim 2, wherein data is transferred from said video output of said graphics processor to said codec for compression and storage in said video data storage device.

4. The apparatus as claimed in claim 3, wherein said graphics processor has an input buffer for storing a sequence of fields of said at least two video inputs and an output buffer for storing a sequence of fields of said graphics processor video output.

5. The apparatus as claimed in claim 4, wherein said input buffer also stores input graphic image fields.

6. The apparatus as claimed in claim 1, wherein said graphics processor has an input buffer for storing a sequence of fields of said at least two video inputs and an output buffer for storing a sequence of fields of said graphics processor video output.

7. The apparatus as claimed in claim 6, wherein said input buffer also stores input graphic image fields.

8. The apparatus as claimed in claim 1, wherein said second video bus is a single bus communicating data multiplexed on said bus to all of said at least two video input.

9. The apparatus as claimed in claim 7, further comprising an input for compressed digital video input from external device, and a decompression device, one of said at least two video inputs comprising decompressed data from said compressed digital video input.

10. The apparatus as claimed in claim 9, wherein said compressed digital video input comprises one of an IEEE 1394 interface and an SDTI interface.